

D.P.U. 94-137

Application of Fitchburg Gas and Electric Light Company, pursuant to G.L. c. 164, § 94G(a), for approval by the Department of Public Utilities of the Company's annual performance program relating to fuel procurement and use.

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FOR: FITCHBURG GAS & ELECTRIC LIGHT  
COMPANY  
Petitioner

## I. INTRODUCTION

On July 20, 1994, pursuant to G.L. c. 164, § 94G(a), Fitchburg Gas and Electric Light Company ("Fitchburg" or "Company") filed a petition with the Department of Public Utilities ("Department") requesting approval of proposed generating unit performance goals for the performance period November 1, 1994 through October 31, 1995. Section 94G(a) requires each electric company to file with the Department annual performance programs that provide for the efficient and cost-effective operation of its generating units. Each company's performance program must include proposed unit and system performance goals for availability factor ("AF"), equivalent availability factor ("EAF"), capacity factor ("CF"), forced outage rate ("FOR"), and heat rate ("HR"). The petition was docketed as D.P.U. 94-137.

In support of its petition, the Company sponsored the testimony of David W. Lavoie, contracts supervisor for UNITIL Service Corporation (RR-DPU-4).<sup>1</sup> The evidentiary record includes two exhibits and four responses to record requests.

## II. FITCHBURG'S SUPPLY-SIDE PORTFOLIO

Fitchburg owns 4.5 percent (20.1 megawatt ("MW")) of New

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<sup>1</sup> UNITIL Service Corporation, an affiliate of Fitchburg, provides management services to the Company, including preparation of the Company's performance goals (Tr. at 6-7).

Haven Harbor, a

447 MW oil-fired unit operated by United Illuminating Company, and receives power from this unit in proportion to its ownership share under a life-of-unit contract (Exh. FGE-1, at 4-5). Fitchburg also owns 0.18 percent (1.1 MW) of Wyman 4, a 619 MW oil-fired unit operated by Central Maine Power Company, and receives power from this unit in proportion to its ownership share under a life-of-unit contract (id.). Fitchburg also owns 0.22 percent (2.5 MW) of Millstone 3, a 1,148 MW nuclear unit operated by Northeast Utilities ("NU"), and receives power from this unit in proportion to its ownership share under a life-of-unit contract (id.). The Company leases and operates only one unit, Fitchburg 7, a 26.6 MW gas turbine unit, and receives 100 percent of power generated from the unit under a life-of-unit contract (Exhs. FGE-1, at 1; FGE-2-3).

The Company also obtains a portion of its power supply through its entitlements in various generating units under purchase power contracts with Green Mountain Power Corporation ("GMP"), Hydro Quebec, Linweave Inc., Public Service of New Hampshire ("PSNH"), and Kenetech, including a Kenetech Short Term contract (Exh. FGE-1, at 5). The Company's contract with GMP entitles the Company to 10 MW from Vermont Yankee through the performance period (id.). Vermont Yankee is a 521.8 MW nuclear plant that is owned and operated by Vermont Yankee Nuclear Power Corporation, of which GMP is part

owner (Exh. FGE-2-5). The remaining purchase power contracts entitle the Company to

7.8 MW of system power from Hydro Quebec, 3.0 MW of power from Linweave Inc.,

5.0 MW of system power from PSNH, 14.0 MW of power from Kenetech, and 3.0 MW of power from the Kenetech Short Term contract (Exhs. FGE-1, at 5; FGE-2-1; FGE-2-6). The remainder of the Company's power supply comes from the New England Power Pool ("NEPOOL"), small power producers, and short-term contracts (Exhs. FGE-1, at 1; FGE-2-2; FGE-2-7).

For the purpose of distinguishing those units that contribute most to system costs, performance programs identify major and minor units. Major units are units which contributed at least five percent of the system generation (as measured in megawatt-hours) in any of the previous three years, or units in which the Company has at least a 100 MW entitlement. Any unit that does not qualify as a major unit is a minor unit. In keeping with these standards, the Company identified its major units as Millstone 3, New Haven Harbor, and Vermont Yankee (Exh. FGE-1, at 2).

### III. THE COMPANY'S PROPOSED GOALS

The Company proposed goals for New Haven Harbor, Millstone 3, Vermont Yankee, Fitchburg 7, and Wyman 4 (Exh. FGE-2-3). Fitchburg submitted proposed goals for its major and minor units that were

calculated in a manner that was generally consistent with the methodologies approved in the Company's last performance program, Fitchburg Gas and Electric Light Company, D.P.U. 93-5C-1 (1993) (Exhs. FGE-1, at 2; FGE-2-8; FGE-2-3). Because the Company receives its capacity entitlement regardless of the availability of any particular Hydro Quebec generating unit, no performance goals have been proposed for the Hydro Quebec contract (Exhs. FGE-1, at 5; FGE-2-6). According to the Company, Fitchburg bears no performance risk in the units associated with the Linweave and Kenetech purchase power contracts, including the Kenetech Short Term contract (Exh. FGE-1, at 1, 2, and 5; Tr. at 11; RR-DPU-1). The Company also has no obligation to make payments in the event of interruptions, suspensions or deratings of the units associated with these contracts (id.). Therefore, the Company did not propose performance goals for the Linweave and Kenetech contracts (id.). The Company's contract with PSNH is for 5.0 MW of system power; therefore, the Company receives its capacity entitlement from PSNH regardless of the availability of any particular PSNH generating unit (Exhs. FGE-1, at 5; FGE-2-1). According to the Company, the PSNH contract ensures a high level of availability and separates the Company from risk associated with poor performance (id.). Therefore, the Company did not propose performance goals for the generating units comprising the PSNH contract (id.).

Under the Company's performance goal proposal, the EAF goals

for major and minor units were set at values corresponding to each unit's Target Unit Availability ("TUA"), the availability targets that NEPOOL sets for each member utility's units under its Performance Incentive Program (Exhs. FGE-1, at 2; FGE-2-3; FGE-2-8). In developing its proposed goals, the Company used the January 1993 revision of TUAs adopted by the NEPOOL Executive Committee, which became effective in the 1993-1994 performance year (id.).

The Company calculated the remaining performance goals (i.e., AF, CF, FOR, and HR) in accordance with the major unit methodology approved by the Department in D.P.U. 93-5C-1, regardless of whether units met the major or minor unit criteria (id.).<sup>2</sup> The Company also calculated system goals in a manner consistent with the methodology

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<sup>2</sup> AF goals were derived by adding to the EAF goal the ratio of average annual equivalent derated hours for the last three years to average annual period hours ("PH") (Exh. FGE-2-3). CF goals were derived by multiplying the ratio of the three-year average CF to the three-year average EAF by the EAF goal (id.). FOR goals were derived by dividing projected forced outage hours ("FOH") by the sum of projected FOH and service hours ("SH") (id.). Projected FOH were developed by dividing the three-year average FOH by the three-year average PH, then multiplying by the PH in the performance year (id.). Projected SH were developed by calculating the ratio of three-year average SH to three-year average available hours ("AH") and multiplying that ratio by the AF goal, then by PH in the performance year (id.). HR goals were set at the best (lowest) annual HR obtained during the previous three years (id.).

that has been approved in D.P.U. 93-5C-1 (id.).<sup>3</sup>

#### IV. ANALYSIS AND FINDINGS

The Department has reviewed the Company's goals proposal and finds that it includes all the units that should be included in the Company's performance program. The Department also finds that proposed goals for major and minor units were calculated in a manner consistent with the methodologies approved by the Department in D.P.U. 93-5C-1.

In D.P.U. 93-5C-1, the Department found that several advantages would result if goals were adopted based on NEPOOL TUAs: (1) the methodology would produce the same EAF goal for generating units included in more than one electric company's supply portfolio; and (2) the methodology would reduce the time, effort, and expense incurred by a company in preparing goal-setting filings and by the Department in reviewing those filings.

In this proceeding, the Department reaffirms its findings in

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<sup>3</sup> System goals for EAF, AF, CF, FOR, and HR were developed from the weighted averages of the goals for the individual units (Exh. FGE-2-3). The weighting factor for each unit was the ratio of unit to system generation as projected during the performance year (id.). Projected generation for each unit was calculated by multiplying the Company's entitlement in each unit's capacity by its CF goal, then by the PH in the performance year (id.). Projected system generation was calculated as the sum of projected unit generations across the system (id.). For the system HR goal calculation, the weighting factor for each fossil and nuclear unit was developed as a ratio of unit to system generation (id.).

D.P.U. 93-5C-1 and finds that the efficient and effective administration of Fitchburg's performance program is best served by the goals proposal submitted by the Company in Exhibits FGE-1 and FGE-2-3. The Department approves the goal-setting methodologies implicit in that proposal, and the resultant unit and system performance goals, as identified in Exhibit FGE-2-3. The approved Fitchburg unit and system goals based on NEPOOL TUAs are identified in Table 1 attached to this Order.

V. ORDER

Accordingly, after due notice, hearing, and consideration, it is ORDERED: That the generating unit and system performance goals for the Fitchburg Gas and Electric Light Company, for the period November 1, 1994 through October 31, 1995, shall be those contained in Table 1 attached to this Order; and it is

FURTHER ORDERED: That, as part of its next performance filing, the Company shall submit potential performance goals based on NEPOOL TUAs effective at that time, and shall comply with the requirements set forth in this Order; and it is

FURTHER ORDERED: That the Company shall file its next performance program goals by August 1, 1995, and the next performance period shall run from November 1, 1995 through October 31, 1996.



by Order of the Department,

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Kenneth Gordon, Chairman

Commissioner

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Mary Clark Webster,